

Date: Friday, 10/5/2007 10:58:34 AM
 User: * Kim Johnston

Process Sheet

41

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : ARMOR SHIELD
 Job Number : 35028
 Estimate Number : 12378
 P.O. Number : *N/A*
 This Issue : 10/5/2007 S.O. No. : *N/A*
 Prsht Rev. : NC
 First Issue : *N/A* Type : LANDING GEAR
 Previous Run : 33935
 Written By :
 Checked & Approved By : *07.10.05*
 Comment : Est Rev: A New Issue 06-04-19 JLM

Part Number : D206667203A
 Drawing Number : DS19326
 Project Number : N/A
 Drawing Revision : A
 Material : *N/A*
 Due Date : 10/12/2007 Qty: 1 Um: Each

Additional Product

DARTTEL: 1-613-632-3336
FAX: 1-613-632-4443

TRANSPORT CANADA APPROVAL # 09-89

P/N	D206-667-203A	CHG	CHG001
DESC	Crosstube Aft High	SIC	SH01-5
LOT	B35028	SIC	SR01304NY
MODEL	Bell 206L/L1/L3/L4	SIC	

Job Number:



Seq. #:

Machine Or Operation:

Description:

MADE IN CANADA

1.0

DC

DOCUMENT CONTROL



Comment: Photocopy bluefile & type labels per PPPD206-667-203A CHG001
 Add DSI 9326 to existing paper work.

2.0

D206667203

Crosstube Installation



Comment: Qty: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)
24
 End Crosstube
 Batch: *34144* *IT 07-10-17*

3.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
 1-Remove tube from packaging

2-Apply Armor shield as per DSI 9326
 A/R Armor Shield Batch: *105 320*

*REV B**ATTACHED**MA 07/11/10**PTD*

4.0

QC14

INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-667-203A

Location:

PPP Rev: *DNAPT**07/14/10 (1)**5.1**07.11.15**chg002*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: D Date: 7/11/22
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/11/01	3.0	Strip old armor shield off and paint.	<u>GS1042</u>	Repaint and re-Armor shield with new armor shield per Bill B	<u>mm</u> 07/11/10	<u>07-11-14</u>	<u>GS1042</u>	<u>07-11-14</u>

NOTE: Date & initial all entries

Date: Friday, 10/5/2007 10:58:34 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARMOR SHIELD

Job Number: 35028

Part Number: D206667203A

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

①
D 21/11/02

Job Completion



U 07/11/02

DART		TEL: 1-613-632-3336 FAX: 1-613-632-4443	
TRANSPORT CANADA APPROVAL #09-89			
P/N	D206-667-203A	CIC	CHG001
DESC	Crosstube Aft High	SIC	SH01-5
LOT	B35028	SIC	SR01304NY
MODEL	Bell 206L/L 1/L 3/L 4	SIC	
MADE IN CANADA			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>PH</i>	DRAWN BY <i>PH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>J.J.</i>	APPROVED <i>A</i>	DRAWING NO. DSI 9326	REV. A SHEET 1 OF 1
DATE 06.02.14		TITLE ARMOR SHIELD	SCALE NTS
A	06.02.14	NEW ISSUE	

DART SERVICE INSTRUCTION

To further protect Dart crosstubes from mechanical damage in service, they may be treated with "Armor Shield" surface treatment.

INSTALLATION	CANADIAN STC	FAA STC
D205-596-101/-103/-105/-107	SH03-6	SR01742NY
D212-664-101/-201	SH01-9	SR01298NY
D412-664-203		
D206-667-101/-103/-201/-203	SH01-5	SR01304NY
D407-667-105/-205		
D058-676-101/-201	N/A	SR01018SE

To designate crosstubes with 'Armor Shield' add 'A' to the Part Number. For example, D206-667-101A is a D206-667-101 crosstube coated with Armor Shield. It is acceptable to apply the Armor Shield in regions shown in Figure 1 only. It is **NOT** acceptable to apply Armor Shield in the cuff and support/clamp regions.

1.0 To apply Armor Shield

- 1) Ensure the crosstube is appropriately finished in accordance with the relevant manufacturing drawing or Instruction for Continued Airworthiness (ICA).
- 2) Mask areas around supports and cuffs per Figure 1. Abrade paint finish in areas requiring protection using 320 grit sandpaper.
- 3) Clean/degrease surface of crosstube using Methyl Ethyl Ketone (MEK), 4105S Wash'n'Wipe Degreaser, or equivalent and wipe the surface to clean the entire area.
- 4) Apply 3 coats of Proform PF 746 or PF 746-1 to surface (apply additional coats when surface is dry, but not fully cured)
- 5) Allow 5 hours for coating to dry.
- 6) Apply 2 coats of Imron 500s Polyurethane Enamel clear + Dupont Imron Polyurethane Enamel Activator 192S (mix 3:1). Mix 15 minutes prior to application and allow 15 minutes before applying additional coats.

2.0 Armor Shield removal/re-application

To remove the Armor Shield coating or if damage to the coating and/or crosstube is observed during inspection.

- 1) Remove Armor Shield from the affected area using 80 grit sandpaper. To remove Armor Shield from larger areas, bead blasting has been determined to be the most effective technique.
- 2) Repair mechanical damage (within limits) to the crosstube and touch up finish in accordance with the relevant ICA.
- 3) Apply Armor Shield in accordance with Section 1.0 of these instructions.

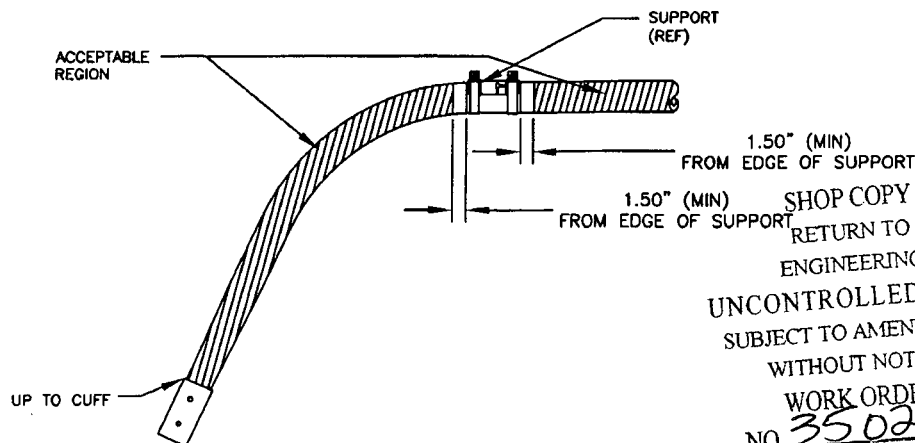


FIGURE 1 - ACCEPTABLE REGIONS TO BE COATED WITH ARMOR SHIELD

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *D. Shepherd*
D. SHEPHERD (DE # 02)

DATE: 06.02.14
CERT. NO.: SH03-6/SH01-9/SH01-5
ISSUE NO.: 3/3/3

SHOP COPY
RETURN TO
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 35028

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DART SERVICE INSTRUCTION

To further protect Dart crosstubes from mechanical damage in service, they may be treated with "Armor Shield" surface treatment. To designate crosstubes with 'Armor Shield' add 'A' to the Part Number. For example, D206-667-101A is a D206-667-101 crosstube coated with Armor Shield. The Change Number of Dart crosstubes with "Armor Shield" is affected as per above table. It is acceptable to apply the Armor Shield in regions shown in Figure 1 or Figure 2 only. It is **NOT** acceptable to apply Armor Shield in the cuff and support/clamp regions.

INSTALLATION	STC		CHANGE NUMBER	
	CANADIAN	FAA	DSI 9326 REV. A (Proform PF746/746-1 Treatment)	DSI 9326 REV. B (BCG4 Treatment)
D205-596-101A/-103A/-105/-107A	SH03-6 ISSUE 3	SR01742NY	CHG 001	CHG 002 (or later)
D212-664-101A/-201A D412-664-203A D412-664-105A/-205A	SH01-9 ISSUE 3	SR01298NY	CHG 002 (or earlier) CHG 004 (or earlier) N/A	CHG 003 (or later) CHG 005 (or later) CHG 001 (or later)
D206-667-101A/-103A/-201A/-203A D407-667-105A/-205A	SH01-5 ISSUE 3	SR01304NY	CHG 001 CHG 002 (or earlier)	CHG 002 (or later) CHG 003 (or later)
D058-676-101A/-201A	N/A	SR01018SE	CHG 001	CHG 002 (or later)
D350-748-101A/-201A	SH06-27 ISSUE 1	SR02359NY	N/A	CHG 001 (or later)

1.0 TO APPLY ARMOR SHIELD

- 1.1 Ensure the crosstube is appropriately finished in accordance with the relevant manufacturing drawing or Instruction for Continued Airworthiness (ICA).
- 1.2 Clean/degrease surface of crosstube using Methyl Ethyl Ketone (MEK), 4105S Wash'n'Wipe Degreaser, or equivalent and wipe the surface to clean the entire area
- 1.3 Mask areas around supports and cuffs per Figure 1 or Figure 2 (D350-748-101/-201 only). Abrade paint finish in areas requiring protection using 800 grit sandpaper. Ensure the surface is de-glossed.
- 1.4 Re-clean the surface per Step 1.2.
- 1.5 Mix BCG4 Component A and BCG4 Component B in accordance with manufacturer's instructions.
- 1.6 Apply 5 wet coats in accordance with manufacturer's instructions.
- 1.7 To avoid hard tape line, unmask immediately after application of last coat.
- 1.8 Allow BCG4 to dry in accordance with manufacturer's instructions.

2.0 ARMOR SHIELD REMOVAL / RE-APPLICATION

To remove the Armor Shield coating or if damage to the coating and/or crosstube is observed during inspection.

- 2.1 Remove Armor Shield from the affected area using 80 grit sandpaper. To remove Armor Shield from larger areas, bead blasting has been determined to be the most effective technique.
- 2.2 Repair mechanical damage (within limits) to the crosstube and touch up finish in accordance with the relevant ICA.
- 2.3 Apply Armor Shield in accordance with Section 1.0 of these instructions.

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01
APPROVED BY: <u>D. SHEPHERD (DE # 02)</u>
DATE: <u>07.10.17</u> CERT. NO.: <u>SEE TABLE</u> ISSUE NO.: <u>SEE TABLE</u>

B	BCG4 REPLACES DISCONTINUED PROFORM PF 746 OR PF 746-1; ADD D350-748-101/-201	MB	07.10.17
A	NEW ISSUE	PH	06.02.14
REV.	DESCRIPTION	BY	DATE
DESIGN	<u>PH</u>	DART AEROSPACE LTD	
DRAWN	<u>J</u>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<u>PH</u>	DRAWING NO.	REV. B
MFG. APPR.	<u>EE</u>	DSI 9326	SHEET 1 OF 2
APPROVED	<u>[Signature]</u>	TITLE	SCALE
DE APPR.	<u>[Signature]</u>	ARMOR SHIELD	NTS
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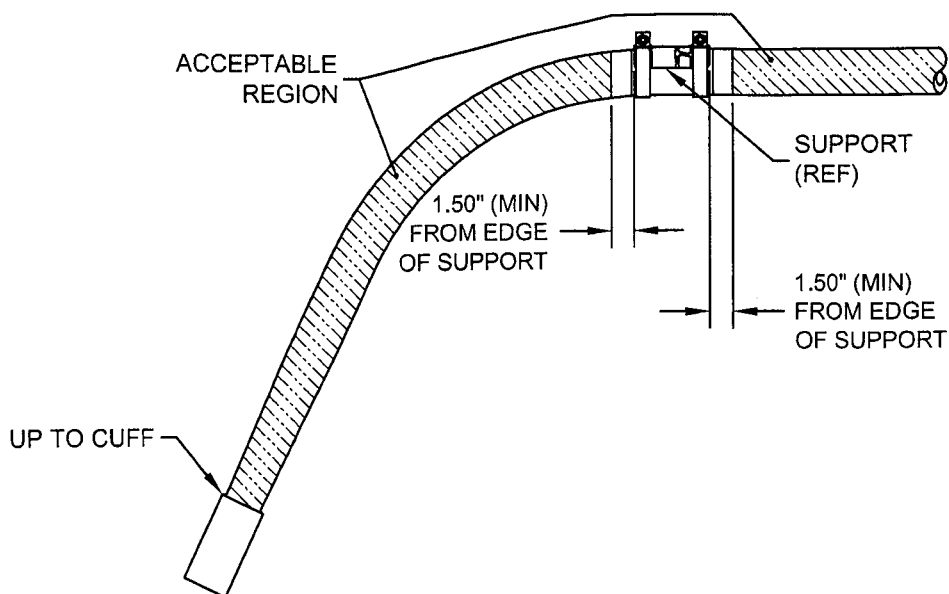


FIGURE 1 - ACCEPTABLE REGIONS TO BE COATED WITH ARMOR SHIELD
(SEE FIGURE 2 FOR D350-748-101/-201 CROSSTUBES)

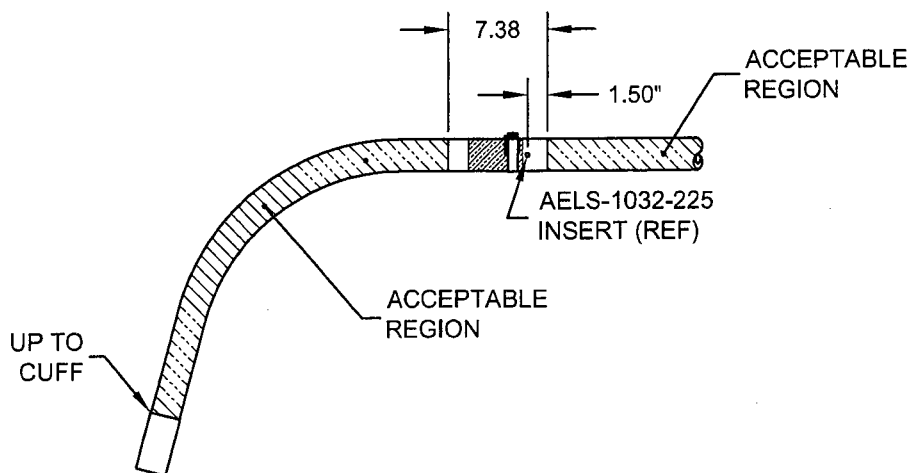


FIGURE 2 - ACCEPTABLE REGIONS TO BE COATED WITH ARMOR SHIELD
(D350-748-101/-201 ONLY)

CANADA
 DEPARTMENT OF TRANSPORT
 AIRCRAFT CERTIFICATION
 BRANCH
 DAO # 01-O-01

APPROVED

BY: *[Signature]*
 D. SHEPHERD (DE # 02)

DATE: 07.10.17
 CERT. NO.: SEE TABLE
 ISSUE NO.: SEE TABLE

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. B
MFG. APPR.	CE	DSI 9326	SHEET 2 OF 2
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	ARMOR SHIELD	NTS
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Date: Friday, 10/5/2007 10:58:34 AM
User: Kim Johnston

Process Sheet

41

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : ARMOR SHIELD
Job Number : 35028
Estimate Number : 12378
P.O. Number :
This Issue : 10/5/2007 S.O. No. :
Prsht Rev. : NC Part Number : D206667203A
First Issue : / / Type : LANDING GEAR Drawing Number : DSI9326
Previous Run : 33935 Drawing Revision : A
Material :
Due Date : 10/12/2007 Qty: 1 Um: Each
Written By :
Checked & Approved By : 07.10.05
Comment : Est Rev: A New Issue 06-04-19 JLM

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: Photocopy bluefile & type labels per PPPD206-667-203A CHG001
Add DSI 9326 to existing paper work.

07.10.05

2.0 D206667203 Crosstube Installation



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Fwd Crosstube
Batch: _____

3.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
1-Remove tube from packaging

2-Apply Armor shield as per DSI 9326
A/R Armor Shield Batch: _____

REFERENCE ONLY

4.0 QC14 INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

5.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Identify and pack for shipping as per PPP D206-667-203A
Location: _____
PPP Rev: _____